

## Research Brief High School Schedules

**Question:** How do common High School schedules compare?

**Summary of Findings:** Findings are mixed on the effectiveness of various scheduling models. These models include a traditional 7 or 8 period day, a block schedule with four classes meeting one day and another four meeting the next (A/B Block), a block schedule of four classes that meet every day for a term (4x4 Block), and several hybrid models. Some findings conclude most schools are happy with their transition to longer class periods, others that achievement and student attitude are improved, and others that the block schedule proved disastrous over traditional scheduling. (Anecdotally, my son, who is bright, but struggles academically, performs much better in a 4x4 block where he only has to concentrate on four classes instead of eight.)

These mixed findings may say less about the effectiveness of block scheduling than they do about what questions the researchers asked and how the changes in scheduling were implemented. There are numerous reports of teachers simply lecturing for 80 minutes or still presenting for 40 and giving the remaining time to students to do homework, resulting in half the course material being covered compared to traditional scheduling. It is not surprising in such cases that achievement can be reduced and student and teacher attitudes decline. As Kathleen Cushman of the Essential Schools Project states, "Moving to longer schedule blocks can help schools focus more on depth in the curriculum and active student engagement. But unless teachers get substantial time to develop and reflect on new practices-and unless the needs of students drive the use of time - a long-block schedule won't accomplish much."

Much has been written on lessons learned from Block Scheduling, mistakes schools have made, and steps schools might take to avoid those mistakes. The Center for Innovative School Scheduling and the Center for Applied Research and Educational Improvement are sources for that information.

### Online Resources:

#### **Using Time Well: Schedules in Essential Schools**

Kathleen Cushman

*Horace*. Volume 12, #2. Nov. 1995.

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[http://www.essentialschools.org/cs/resources/view/ces\\_res/15](http://www.essentialschools.org/cs/resources/view/ces_res/15)

#### **Policy Briefing: Block Scheduling in Secondary Schools**

Barbara Dougherty

<http://www.educationpartnerships.org/>

This paper describes different models of block scheduling, offers benefits and disadvantages of the models, and presents suggestions for schools considering block scheduling.

<http://www.prel.org/products/Products/block-scheduling.htm>

### **Center for Innovative School Scheduling**

Welcome to the Center for Innovative School Scheduling (CISS) at the University of Virginia's Curry School of Education. The primary purpose of this Center is to provide interested individuals with the latest and best information on innovative practices in school scheduling. In addition, it provides users with some of the latest research on the subject and links them to practitioners and researchers who are leading the way in innovative scheduling.

<http://curry.edschool.virginia.edu/centers/ciss/>

Block Scheduling: What We've Learned

<http://curry.edschool.virginia.edu/centers/ciss/learned/main.html>

### **The Center for Applied Research and Educational Improvement (CAREI)**

Block Scheduling

<http://education.umn.edu/CAREI/Blockscheduling/default.html>

Primer and FAQ

<http://education.umn.edu/CAREI/Blockscheduling/QandA/default.html>

Research & Resources

<http://education.umn.edu/CAREI/Blockscheduling/Resources/default.html>

### **Block Scheduling: An Introduction**

By Michael Rettig and Judith Cannizzaro

[http://www.phschool.com/professional\\_development/block\\_scheduling/introduction.html](http://www.phschool.com/professional_development/block_scheduling/introduction.html)

### **Block Scheduling's Missteps, Successes and Variables**

Michael D. Rettig and Robert Lynn Canady

The School Administrator Web Edition; October 2003

A study finds steady progress in the use of alternatives to the traditional schedule.

While a few schools have returned to single periods, the vast majority of schools

that adopted alternative scheduling models continue to be satisfied with their decisions. We have documented one state's history of adoption, implementation and minimal reversion from block scheduling; highlighted mistakes some schools have made; reviewed how alternative schedules have been used as part of schools' efforts to improve school environment and achievement; and looked at three variables related to school scheduling that affect student learning.

[http://www.aasa.org/publications/sa/2003\\_10/Rettig.htm](http://www.aasa.org/publications/sa/2003_10/Rettig.htm)

### **Block Scheduling (or “Alternative” or “Flexible”)**

<http://www.cortland.edu/flteach/FAQ/FAQ-Block.html>

### **Block Scheduling in the High School Setting**

A Synthesis of Evidence-Based Research

Chance W. Lewis, Marc A. Winokur, R. Brian Cobb, Gail S. Gliner, & Joel Schmidt

The purpose of this study was to produce a systematic review and synthesis of evidence-based research on the effect of block scheduling on student achievement in United States high schools. This report provides a brief introduction to block scheduling, chronicles the search strategies used to locate the final literature set, and describes the processes employed to code the studies on outcome, intervention, and methodological criteria using the What Works Clearinghouse (WWC) framework. In addition, findings, conclusions, and recommendations are discussed for the studies that merited inclusion into the block scheduling evidence base.

[http://64.233.161.104/search?q=cache:H1xB-Y-QxPUJ:mycahs.caahs.colostate.edu/chance.lewis/Block\\_Scheduling\\_in\\_HS.pdf+%24x4%22+%22A/B%22+traditional+%22high+school%22+&hl=en](http://64.233.161.104/search?q=cache:H1xB-Y-QxPUJ:mycahs.caahs.colostate.edu/chance.lewis/Block_Scheduling_in_HS.pdf+%24x4%22+%22A/B%22+traditional+%22high+school%22+&hl=en)

### **Block and traditional schedules: Effects on students with and without disabilities in high school**

by Bottge, Brian J, Gugerty, John J, Serlin, Ron, Moon, Kyoung-Suk  
National Association of Secondary School Principals. NASSP Bulletin, Sep 2003

The purpose of this study was to compare the effects of traditional and block schedules on the academic achievement of high school students with and without disabilities. Achievement data were collected from the cumulative records and Individual Education Plans of 160 students with disabilities and the cumulative records of 460 students without disabilities. Achievement was measured by students' GPA; state-mandated tests in reading, language, math, science, and social studies; and college entrance ACT. Results showed no difference on all comparisons between students with disabilities attending block-scheduled high schools and students with disabilities attending traditional-scheduled high schools.

Similar results were found for students without disabilities. Teachers on both schedules reported high levels of satisfaction and comparable amounts of time on instructional activities.

[http://www.findarticles.com/p/articles/mi\\_qa3696/is\\_200309/ai\\_n9266111](http://www.findarticles.com/p/articles/mi_qa3696/is_200309/ai_n9266111)

## **Annotated Bibliographies**

### **Block Scheduling**

Research & Resources - Resources by Subject

Annotated bibliography by subject area.

<http://education.umn.edu/CAREI/Blockscheduling/Resources/Subject1.html>

### **General Research: Studies showing advantages with block scheduling**

Annotated bibliography

<http://www.capescheduling.com/page/page/861491.htm>

### **Block Scheduling Issues**

Annotated bibliography

<http://killeenroos.com/link/block.htm>

### **Concerns Regarding Block Scheduling**

<http://www.capescheduling.com/page/page/861487.htm>

### **Block Scheduling**

An AskERIC Response

June 2003

[http://www.eduref.org/Virtual/Qa/archives/Educational\\_Management/Scheduling/blockschedules.html](http://www.eduref.org/Virtual/Qa/archives/Educational_Management/Scheduling/blockschedules.html)

## **ERIC Resources**

(Note: ERIC documents can be found by going to <http://www.eric.ed.gov/> and entering the ERIC ID#)

### **Secondary School Scheduling Models: How Do Types of Models Compare to the ACT Scores?**

Hackmann, Donald G.; Hecht, Janet E.; Harmston, Matt T.; Pliska, Ann-Maureen; Ziomek, Robert L.;

This study examined the relationship between school scheduling format and average composite scores on the ACT Assessment after controlling for lifestyle factors, gender, school enrollment levels, number of examinees, and years under the scheduling model. The participants were 38,089 high schools seniors in 568

<http://www.educationpartnerships.org/>

public high schools in Iowa and Illinois who completed the ACT Assessment in 1999. The focus was on data at the school level, and individual schools were represented by mean ACT composite scores for the school. The three scheduling models considered were: (1) traditional eight period (351 schools); (2) eight block alternating day (161 schools); and (3) 4x4 semester (56 schools). In general, findings show that the scheduling type used at a school does not predict the ACT composite scores when examined at the school level. Some of the limitations of the study are discussed.

ERIC #: ED452230

**The Effects of Block Scheduling.**

Rettig, Michael D.; Canady, Robert Lynn;

School Administrator, v56 n3 p14-16,18-20 Mar 1999

Research reveals important generalizations about block scheduling. A/B schedules are easier to implement than 4/4 schedules, which must be adapted to allow some year-long courses. Merely changing the school bell schedule will not guarantee better student performance. However, block scheduling typically improves climate, attendance, and achievement.

ERIC #: EJ585529

**The Block Scheduling Handbook.**

Queen, J. Allen;

Block scheduling encourages increased comprehensive immersion into subject matter, improved teacher-student relationships, and decreased disciplinary problems. While block scheduling may offer

many advantages, moving to a block schedule from conventional scheduling can be a major adjustment for both students and teachers. This guide is intended to ease the problems of change by combining a theoretical background with specific practical and proven tips and tools for implementing a block schedule. It discusses block scheduling in elementary, middle, and high schools, and includes an indepth case study of an exemplary elementary-school curriculum. It explains in detail the three block models-the 4x4 block schedule, the A/B block schedule, and the modified block-and how to select the best model. It offers guidance on curriculum alignment, pacing, and assessment models. It outlines effective instructional strategies for block scheduling, including classroom management and student-centered strategies. And it provides sample models, lessons, activities, forms, evaluations, and surveys for easy implementation.

ERIC #: ED469437

**Block Scheduling: Students' Perceptions of Readiness for College Math,**

**Science, and Foreign Language.**

Salvaterra, Mary; Lare, Douglas; Gnall, John; Adams, Don;

American Secondary Education, v27 n4 p13-21 Sum 1999

To garner student perceptions, a questionnaire listing questions for math, science, and foreign language was sent to the 1997, 1996, and 1995 graduates of two Pennsylvania high schools that had implemented the 4X4 semester-block-scheduling model. Overall, students felt their block-scheduled high school prepared them adequately for college

ERIC #: EJ589419

**Block Scheduling: Restructuring the School Day. Hot Topics Series.**

Flinders, David J., Ed.;

The advantages and disadvantages of block scheduling are considered in 24 articles.

ERIC #: ED461914

**Implementing the 4X4 Block Schedule: Is It Worth It?**

Walker, Sharron;

Rural Educator, v20 n3 p40-45 Spr 1999

The 4X4 block schedule was implemented in a rural high school in southern Arizona in 1997. Teacher and student surveys show that after the change, teachers were more satisfied with the teaching and learning environment, their relationship with students, and systemic supports, and students were more satisfied with school. Benefits, problems, and unexpected results of block scheduling are discussed.

ERIC #: EJ586577

**The Feasibility of 4X4 Block Scheduling in Secondary Schools: A Review of the Literature.**

Stanley, Anthony; Gifford, Lorna J.;

This paper reviews the literature on 4x4 block scheduling. Studies reveal that the advantages of such scheduling are simplicity, potential for greater student achievement, and reduced disciplinary

referrals. Discipline is enhanced through this type of schedule because it decreases the number of times that students are moving in the halls between disciplined environments. The schedule promotes student achievement by allowing students to attend additional classes during their 4-year high school tenure, by encouraging more engaging learning activities, and by allowing students to concentrate narrowly on the four subjects taken each semester. This concentration may allow for better mastery of material, but it does not allow for

the breadth of coverage found in traditional schedules. Consequently, the 4x4 block schedule should not be implemented in districts where test scores and strict adherence to state curriculum guides are considered sacred. Furthermore, student motivation plays a large part in the success or failure of the 4x4 block schedule; motivated students excel in such an environment, whereas poorly motivated students sometimes fall further behind than in traditional schedule environments. It is emphasized that careful planning in implementing 4x4 scheduling is essential to its success.

ERIC #: ED429333

Date: 8/8/2005  
Engaged Learning

Submitted By: Mike Muir, Maine Center for Meaningful

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